

TEACHERS' RETIREMENT BOARD
AD HOC GOVERNANCE COMMITTEE

SUBJECT: Cortex Presentation

ITEM NUMBER: 4

ATTACHMENT(S): 1

ACTION: X

DATE OF MEETING: July 8, 1998

INFORMATION: _____

PRESENTER(S): Mr. Iannucci

Mr. Tom Iannucci will present the final report on the review of STRS' pension governance system.

STRS ROLES AND RESPONSIBILITIES

I. BACKGROUND

In January 1998, Cortex presented the results of its review of STRS's pension governance system. A key finding was that the roles of the various decision-making bodies involved in the governance of STRS required clarification. Accordingly, the STRS Board asked Cortex to undertake a follow-up initiative to review the current roles and recommend any changes deemed necessary. As part of this initiative, Cortex was also asked to conduct a benchmarking study of the decision-making structures in place at similar pension funds.

The following report contains the results of the above initiatives.

II. Scope and Methodology

As in the case of the initial governance review, the scope of the project was limited to the investment function. Accordingly, we focused on the roles and responsibilities of the following parties:

- The Board
- Board Chair
- The Investment Committee
- Budget and Audit Committee
- Ad Hoc Governance Committee
- Committee on Executive Compensation
- Corporate Governance Committee
- Chief Executive Officer
- Chief Investment Officer
- The General Consultant

The project did not address the benefit administration function; therefore we did not assess the role of the Benefits and Services Committee or the actuary. We believe, however, that, once the

initiative is complete, the concepts that are developed concerning the delegation of investment-related tasks can be readily applied to the benefit administration function.

The project consisted of three basic steps:

1. Cortex prepared a matrix illustrating STRS's current decision-making structure, which essentially summarized existing documentation. A position paper entitled *Principles of Delegation* was also prepared, which identified ten principles that we recommend should guide the design of a pension decision-making structure. (See Appendix B for copies of the matrix and the position paper). Both documents were presented to the Board at its March 1998 meeting. The position paper was discussed and approved by the Board for the purposes of guiding the remainder of the project.
2. Using the principles contained in the above position paper as a guide, Cortex developed a proposed decision-making matrix. Working sessions were held with the CEO, CIO, and General Consultant, either in person or by telephone, to gain their input. Numerous drafts of the matrix were prepared before arriving at a final version.
3. In concert with step 2 above, Cortex conducted interviews with six other public sector pension plans to identify alternative decision-making practices in use. (Please see Appendix C for a copy of the report.)

III. Proposed Decision-making Framework

The proposed decision matrix is contained in Appendix A, along with a glossary of terms. It is important to note that, in recommending the matrix, our intention has been to provide a framework that will assist STRS in its decision-making process, now and in the future. Issues will inevitably arise that do not readily conform to the matrix. As well, differences of opinion may arise as to the interpretation of certain concepts; e.g., one may debate whether certain issues represent policies or strategies. Nevertheless, we believe that the matrix (along with the proposed principles of delegation) will provide a frame of reference for resolving such issues. We propose, therefore, that the Board approve the matrix as a guiding framework, to be continually reviewed, as opposed to a rigid policy.

In light of the above, the balance of this section provides a discussion of the proposed roles of the Board, Board Chair, Board Committees, CEO, CIO and General Consultant.

The STRS Board

In recommending a role for the Board, we relied on several principles contained in our position paper entitled *Principles of Delegation*, which was approved by the Board:

- Principle 3: The design of the decision-making structure should recognize that there are certain basic tasks that the Board cannot delegate.
- Principle 4: The Board should delegate duties to those decision-making levels that are most likely to possess the requisite knowledge, experience, time availability, or independence to carry them out successfully.
- Principle 5: The decision-making structure should be designed so that responsibilities for high-level policy, strategy, and implementation issues are separated.
- Principle 9: The Board should strive to balance the need to maintain risk control with the need to encourage innovation and initiative among staff.

In light of the above principles, we have recommended that the Board's role be predominantly to establish policies that are long-term in nature and have a major impact on the way the Fund is managed. The Board should play only a limited role in strategy (which is shorter-term in nature) and day-to-day management. These latter functions should, to the extent possible, be delegated to staff.

More specifically, we recommend that the Board restrict itself to dealing mainly with the following policy tasks:

- a) Approve the decision-making structure for the Fund.
- b) Approve how the Board itself will function.
- c) Approve guidelines for the Fund:
 - Mission and objectives
 - risk management policy
 - investment philosophy

- corporate governance policy
 - investment policy
- d) Approve the system for monitoring the performance of significant aspects of the Fund. This is the key to ensuring accountability throughout the decision-making structure.
 - e) Approve the process for selecting the key staff and external agents. This enables the Board to prudently delegate to those who are best positioned to carry out the management of the Fund, and allows the Board to focus on policy.
 - f) Approve the internal control system. This is the key to safeguarding the assets of the Fund.

With respect to strategy, we would suggest that the Board focus on the following task:

- a) The board should approve the basic strategies to be implemented by staff, such as securities selection, strategic asset allocation, tactical asset allocation, securities lending, etc.

It is important to note that a sponsor always has the option of pursuing a very simple investment program whereby it implements its desired asset mix through passive management, and makes no attempt to add additional value through various strategies. Alternatively, a sponsor can engage in various strategies to earn additional value over and above what a passively implemented asset mix would achieve; e.g., securities selection, strategic or tactical asset allocation, securities lending, derivatives strategies, etc.

We suggest that the Board's strategy-related role is to decide which strategies, if any, staff should pursue. The Board should not be involved in devising or implementing specific strategies, as these tasks should fall to staff.

This recommendation may appear to relegate the Board to a subsidiary role in strategic matters. In fact, the Board's role will be crucial to effective risk management:

- It must satisfy itself that a particular strategy has a reasonable chance of succeeding.
- It must satisfy itself that staff has the ability to implement the strategy.
- It must ensure that staff has identified and communicated the risks involved in the strategy.

- If necessary, it must set parameters to contain the risks involved in the strategy.
- It must approve the expected value-added targets to be achieved through the strategy.
- It must monitor staff's implementation of the strategy to ensure that the risks are being contained and the value-added targets are being achieved.
- It must decide when a strategy should be abandoned.

With respect to implementation, we recommend that the Board's role be limited to appointing the Chief Executive Officer and all other service providers that serve the Board directly and assist it in carrying out its duties; i.e., the General Consultant, Auditor, Actuary, etc.

We believe that the Board's role, outlined above, achieves the following:

- It helps to ensure that the Board is able to spend more of its time on the most important, high-level, long-term policy issues, which have the greatest potential impact on the Fund, while still controlling risk.
- It ensures that the knowledge and expertise of staff are effectively utilized in carrying out strategy and day-to-day management.
- It ensures clearer accountability for policy, strategy and implementation.

Admittedly, the above approach differs from the practices being followed by other pension plans we studied. With the exceptions of Virginia Retirement System and, to a lesser extent, LACERA, the Boards we studied generally take a more active approach in strategy and day-to-day management issues.¹ For example, we found that most of the Boards are highly involved in the process of selecting investment managers, for both traditional and non-traditional asset classes.

¹ In the case of VRS, the CIO has the authority to hire investment managers. In the case of LACERA, the Board has allowed its alternative investments consultant full discretion.

The Board Chair:

After reviewing the role of the Chair, and in light of our interviews with other public funds, we have recommended that the Chair play the following role:

- Work with the CEO to develop the Board agenda
- Chair meetings of the Board
- Name Committee Chairs
- Work to ensure that the policies constituting the Board's modus operandi are implemented.

The above is fairly consistent with the approach followed by other funds, and we do not suggest expanding the Chair's role or further elevating the status of the Chair.

A possible additional role for the Chair would be to serve as the Board spokesperson. We found, however, that this was not a common practice at other funds. Typically, communication with the public is carried out by the CEO or, depending on the issue, another appropriate staff person.

Committees of the Board

The workings of the Board committees were beyond the scope of this project. Nevertheless, we found that it was necessary to address at least the general role of committees. Accordingly, we have recommended that the basic role of Board committees include the following:

- Provide recommendations in particular areas of policy;
- Perform hands-on tasks in limited areas: e.g., assessing the CEO's performance; and
- Assist the Board in carrying out its important monitoring responsibilities.

The committee structures of the other funds we studied vary widely. Some have no standing committees, while others have as many as ten. Some have established investment committees, while others have not. Still others have established advisory committees to assist them with investment-related matters. These committees are composed of external experts, and may or may

not include trustees. They generally serve as additional layers of oversight and analysis in arriving at policy decisions.

We are not offering any recommendations to the Board with respect to the use of advisory committees. Nevertheless, we wish to make the Board aware of their existence and use at other pension plans.

Chief Executive Officer & Chief Investment Officer

In developing proposed roles for the CEO and CIO, we relied heavily on one of the principles described in our position paper, *Principles of Delegation*:

Principle 7: The decision-making structure should reflect a linear reporting structure. That is, the organization should consist of a single line of authority and accountability whereby each decision-making party reports upward, ultimately through the CEO to the Board itself.

In light of the above principle, we suggest that the CEO should be clearly accountable not only for the benefit administration function but also for the investment function. Accordingly, the CEO is responsible for making recommendations to the Board on policy-related matters. In arriving at these recommendations, the CEO would seek the views and opinions of the CIO.

The CEO would also make recommendations to the Board as to the strategies that should be pursued by staff. Again, in doing so, he would seek the CIO's recommendations as to the feasibility of various strategies.

Once the Board has approved the investment policies of the fund and the strategies to be pursued, the responsibility for implementing them rests with the CIO and his staff, as they have specific qualifications in this area and are more likely to have the necessary time to devote to it. One would not expect the CEO to be involved in implementation issues such as selecting specific investment managers, real estate transactions or private equity transactions.

Given that the CEO should be accountable to the Board for the performance of the investment program, we also suggest that the CEO should be responsible for hiring and evaluating the CIO. One would expect that the CEO would consult with the Board on these matters, but would ultimately make the decision to hire or terminate the CIO himself.

Our review of the decision-making practices of other public funds revealed that the above approach, while certainly not standard practice, is followed by several funds. For example, in the case of LACERA, the CEO would conduct an executive search for a new CIO and would identify a short-list of three candidates. The Board would then be provided an opportunity to meet the candidates. Ultimately, however, the CEO would select the new CIO. In the case of Colorado PERA, the CEO has also been delegated the authority to hire and evaluate the CIO.

THE GENERAL CONSULTANT

In arriving at an appropriate role for the General Consultant, several issues had to be addressed:

- How can the Board best be served by a General Consultant?
- How can one ensure that the role of the General Consultant is distinct from that of staff, thus minimizing any duplication of responsibilities or efforts?
- How can one minimize conflicts of interest with respect to the General Consultant?²

After considering the above, we have proposed the following:

The General Consultant should serve as a *reasonableness check* for the Board with respect to staff recommendations and performance. That is, while the CEO and CIO are the primary architects of the investment program, the General Consultant is available to assure the Board that staff's recommendations are reasonable. This implies that the Consultant would be expected to:

² This is consistent with Principle 6 in our position paper, *Principles of Delegation*, which states that “one should strive to maximize the degree of objectivity or independence with which all parties approach their role and responsibilities.”

- Confirm for the Board that, in preparing their analyses and recommendations, staff has considered all significant and relevant issues;
- Ensure that, with respect to staff recommendations, the Board is made aware of any viable alternatives that may exist, and the risks, advantages and disadvantages associated with them;
- Ensure that the Board understands whether staff's recommendations are at variance with either the practices of other public plans or empirical evidence;
- Ensure that the Board fully understands the implications of staff recommendations; and
- Provide the Board with objective, independent assessments of the performance of the investment program.

To the extent possible, the Board should not expect the General Consultant to provide specific, independent recommendations. In this way, the General Consultant can remain independent with respect to the investment program, and will be in a better position to provide the Board with an unbiased assessment of the program. To elaborate, if the Consultant were to continually provide recommendations concerning how best to manage the investment program, and the Board were to accept his recommendations, then the investment program would soon begin to reflect the Consultant's personal beliefs, preferences, and views. Consequently, the Consultant would no longer be in a position to comment objectively on the investment program, as he, to a large extent, designed it.

To further ensure that the Consultant can remain objective, we suggest that the board play a more active role in the process of selecting the Consultant. If the full Board does not wish to burden itself with this task, then it may wish to consider establishing an Ad Hoc Selection Committee that would manage the RFP process and identify a short-list of candidates for the Board's consideration.

Admittedly, acting as a reasonableness check will require that the Consultant tread a fine line between commenting on the reasonableness of staff's recommendations and providing its own recommendations as to appropriate policies and strategies. Nevertheless, it is important that everyone involved should understand the Consultant's role and make every attempt to abide by it.

In reviewing the practices of other pension plans, we found the following:

- Not all plans use a general investment consultant; i.e. Virginia Retirement System does not retain a general consultant.
- Typically, the consultant is not considered to be a *reasonableness* or accountability check on staff. Instead, as was indicated by several funds, the interaction between the board, staff, and consultant is considered to follow more of a *team approach*.
- Staff is generally highly involved in the process of selecting the general consultant. In the case of Pennsylvania, however, though staff co-ordinates the selection process, the Board is very active in the process. A board committee is used to review requests for proposals, meet the consultants, and present final candidates to the Board. The Board interviews the final candidates and awards the contract.

The Monitoring Function

In reviewing the proposed decision matrix, the reader will notice that the far right hand column is labeled *Monitoring*. This is an important column, as it sets out the monitoring responsibilities of each decision-making level separately, thus helping to ensure proper supervision of the fund. The inclusion of this column in the matrix is in keeping with the following principles contained in our position paper, *Principles of Delegation*:

Principle 8: The decision-making structure should consciously incorporate checks and balances to ensure that all decision-making parties feel a strong sense of accountability for their performance.

Principle 10: The decision-making structure should include a mechanism that will enable it to continue to evolve to best meet the needs of the organization.

Key features of the Monitoring column include the following:

- Each decision-making level is clearly accountable for its performance to a more senior level;
- The flip side of the above point is that each decision-making level is responsible for monitoring whether subsequent levels have complied with their roles and responsibilities.

That is, the Board monitors the Board committees, The Committee on Executive Compensation monitors the CEO, the CEO monitors the CIO, the CIO monitors investment staff, and staff monitor external managers.

- Each level is responsible for monitoring to ensure that decisions or policies it approves are in fact complied with. Furthermore, they monitor to ensure that the policies continue to be appropriate over time.
- The Board has been assigned explicit responsibility for monitoring the most vital aspects of the Fund:
 - Compliance with and appropriateness of goals and objectives
 - Regulatory compliance
 - Investment performance
 - Compliance with risk management policy
 - Cost effectiveness of investment program

Note that to facilitate effective monitoring by the Board, we have recommended that the Board approve a fund monitoring policy and a risk management policy. These would prescribe in detail the method by which investment performance and risk are to be measured and monitored.

IV. Implementation Issues

The proposed decision-making structure was prepared on the assumption that particular policies would be developed. In order, therefore, to implement the proposed structure, the following actions will be required:

1. Most of the policies that would constitute the Board's *modus operandi* have already been developed. The Board, however, should at some point review and confirm these policies. Outstanding policies that the Board may wish to consider developing include:
 - Board orientation and development policy (Several of the Funds we interviewed indicated that they have such a policy in place.)
 - Board communications policy (covering staff, the public, and service providers)

2. Preparation of a ***risk management policy*** that sets out and prioritizes the various risks being managed, and describes the basic approaches to be followed in managing these risks.
3. Preparation of an ***investment philosophy*** describing STRS's beliefs and assumptions concerning issues such as diversification, market efficiency, and performance measurement. STRS has prepared reports and presentations on these topics in the past, and may be able to simply compile the reports into a single document.
4. Preparation of a ***Fund Monitoring Policy*** that defines the manner in which the various fiduciary aspects of the investment program are to be monitored.
5. Preparation of a ***Selection and Compensation Policy Covering Key Staff*** (i.e. CEO, CIO, and portfolio managers).
6. Preparation of a document describing the ***Internal Control System***. STRS has a complex internal control system in place. It is suggested that a high level summary be prepared and submitted to the Board for its approval.

V. FOLLOW-UP AND CHANGE MECHANISMS

The Ad Hoc Governance Committee has been assigned the responsibility of monitoring that the decision-making structure is complied with and continues to be appropriate. In effect, the Committee is responsible for monitoring the effectiveness of the governance process.

We would like to stress the importance of the above task. Unless the Board commits to monitoring the implementation of the decision-making framework on an annual basis, it is likely that the Board's actual decision-making processes will begin to deviate from the framework approved by the Board. After a period of time, the process by which decisions are made will bear little resemblance to the process that was originally intended. This is due to the dynamic nature of the pension world and to the turnover that inevitably occurs at the Board and senior management levels. Therefore, without ongoing monitoring, the significant time and effort that the current board has invested in arriving at the proposed framework may, unfortunately, be wasted.

It should also be noted that the proposed decision-making framework, if approved, is not carved in stone. Each year, when the Ad Hoc Governance Committee reviews the implementation of the framework, the Board will have an opportunity to discuss opportunities for improving the framework to reflect new developments in the field and changing circumstances. It is important, however, that changes should not be haphazard, but based instead on underlying principles of effective delegation. In this way, there will always be a strong rationale to support the way decisions are made by the current and future Boards. ❖

APPENDIX A

Level	Policy	Strategy	Implementation	Monitoring
The Board	<u>Approves:</u> <ul style="list-style-type: none"> Decision making structure Board's modus operandi Fund Mission, goals and objectives Risk management policy Investment philosophy Investment policy Fund monitoring policy Corporate governance & social responsibility policy Selection and compensation policy for key staff Process for selecting board consultants and managers (trad/non-trad) Internal control system - investment administration Audited financial statements 	<u>Approves:</u> <ul style="list-style-type: none"> Allowable investment strategies & parameters 	<u>Manages/accountable:</u> <ul style="list-style-type: none"> Appoint/terminate CEO Appoint/terminate General Consultant, and other investment consultants serving the Board Appoint/terminate Auditor Appoint/terminate Custodian 	<u>Monitors:</u> <ul style="list-style-type: none"> Compliance with and continued appropriateness of Mission, goals and objectives Regulatory compliance Investment performance as per fund monitoring policy Compliance with risk management policy Cost effectiveness of investment program Performance of consultants serving the Board Mandate compliance by Board committees
Board Chair			<u>Manages:</u> <ul style="list-style-type: none"> Development of agenda Chair meetings of the Board Appointment of Committee Chairs Implementation of Board modus operandi 	
Investment Committee	<u>Recommends to Board on:</u> <ul style="list-style-type: none"> Investment philosophy, goals and objectives Investment policy Risk management policy (investment specific) Fund monitoring policy (investment specific) 	<u>Recommends:</u> <ul style="list-style-type: none"> Allowable investment strategies 		<u>Monitors:</u> <ul style="list-style-type: none"> Compliance with and continued appropriateness of investment policy & philosophy, risk mgmt. & monitoring policies. Compliance with & continued appropriateness of investment strategies
Budgets & Audit Committee	<u>Recommends to Board on:</u> <ul style="list-style-type: none"> Internal control system - investment administration 		<u>Approves:</u> <ul style="list-style-type: none"> Investment division budget 	<u>Monitor:</u> <ul style="list-style-type: none"> Compliance with investment division budget Implementation/continued appropriateness of internal control system
Ad Hoc Governance Committee	<u>Recommends to the Board:</u> <ul style="list-style-type: none"> Decision-making structure Board's modus operandi 			<u>Monitors:</u> <ul style="list-style-type: none"> Compliance with, and continued appropriateness of decision-making structure and Board's modus operandi
Committee on Executive Comp.	<u>Recommends to the Board:</u> <ul style="list-style-type: none"> Selection and compensation policy for key staff 		<u>Manage:</u> <ul style="list-style-type: none"> Assess performance & determine salary for CEO Provide input into CEO's evaluation of CIO performance and salary determination 	<u>Monitor:</u> <ul style="list-style-type: none"> CEO performance Compliance with & continued appropriateness of selection & compensation pply. for key staff
Corporate Governance Committee	<u>Recommend to Board:</u> <ul style="list-style-type: none"> Corporate governance and social responsibility policy 			<u>Monitor:</u> <ul style="list-style-type: none"> Compliance with corporate governance and social responsibility policy
Ad Hoc Selection Committee			<u>Manage:</u> <ul style="list-style-type: none"> Processes for selecting General consultant, Custodian, Auditor, Actuary & other consultants to the Board. 	

Level	Policy	Strategy	Implementation	Monitoring
CEO	<p><u>Recommends to the Board or its committees on all of the above issues.</u></p> <p><u>Approves:</u></p> <ul style="list-style-type: none"> Investment procedures 	<p><u>Recommends to Investment Committee on allowable investment strategies.</u></p> <p><u>Approves:</u></p> <ul style="list-style-type: none"> Annual goals and objectives – Inv. Branch <p><u>Informed by CIO of:</u></p> <ul style="list-style-type: none"> Investment strategies 	<p><u>Recommends to Board or its committees:</u></p> <ul style="list-style-type: none"> Appointment of auditor, custodian, accountant <p><u>Manages/accountable</u></p> <ul style="list-style-type: none"> Planning, organizing & directing work of the System Appoint/Terminate CIO and determine salary* Appoint/Terminate consultants to staff Board orientation and education Coordinate board and committee agenda with Chairs Act as secretary and spokesperson for the Board Implement regulatory requirements of the plan 	<p><u>Monitors above plus</u></p> <ul style="list-style-type: none"> CIO Performance* Progress towards Annual Goals and Objectives Implementation of internal financial controls
CIO	<p><u>Recommends to CEO on all of the above issues.</u></p> <p><u>Approves:</u></p> <ul style="list-style-type: none"> Desk Manuals prepared by department heads 	<p><u>Recommends to CEO:</u></p> <ul style="list-style-type: none"> Allowable investment strategies Annual goals and objectives - Inv. Branch <p><u>Designs:</u></p> <ul style="list-style-type: none"> Investment Strategy (if allowable), e.g.: <ul style="list-style-type: none"> Re-balancing decisions Manager structure Active and Passive management allocations within board policy Internal and External management allocations within board policy Hedging Annual Corporate Governance Plan 	<p><u>Manages/accountable</u></p> <ul style="list-style-type: none"> Investment policies and strategies Annual goals and objectives for Investment Branch Appoint/Terminate internal/external investment management (trad. & non-trad.), and consultants to staff Approve significant investment transactions (traditional & non-traditional) Internal financial controls 	<p><u>Monitors above plus</u></p> <ul style="list-style-type: none"> Compliance by internal and external managers with contracts, mandates & performance expectations
Investment Staff	<p><u>Recommend to CIO:</u></p> <ul style="list-style-type: none"> Investment policies, procedures & desk manuals 	<p><u>Recommend to CIO:</u></p> <ul style="list-style-type: none"> Allowable strategies Annual goals and objectives 	<p><u>Manage:</u></p> <ul style="list-style-type: none"> Investment reporting Vote proxies (domestic) Other day-to-day investment management processes 	<p><u>Monitors</u></p> <ul style="list-style-type: none"> Day-to-day monitoring of external manager performance
General Investment Consultant	<p><u>Advises the Board on:</u></p> <ul style="list-style-type: none"> Reasonableness of investment objectives, philosophy, investment policy, risk management policy, fund monitoring policy (investment-specific) 	<p><u>Advises Board on:</u></p> <ul style="list-style-type: none"> Reasonableness of allowable investment strategies 	<p><u>Manages/accountable</u></p> <ul style="list-style-type: none"> Attend meetings of the IC as required Third-party performance measurement activities Investment education for the Board 	<p><u>Monitors:</u></p> <ul style="list-style-type: none"> Reasonableness of investment policy, philosophy, etc. Interpret performance measurement and evaluation reports from custodian Fund performance as per fund monitoring pply STRS investment approach relative to peers
External Investment Managers			<p><u>Manage:</u></p> <ul style="list-style-type: none"> Day-to-day management of portfolios within portfolio guidelines Vote proxies (international) 	
Fiduciary Counsel				

* These tasks are to be performed in consultation with the Board or the Committee on Executive Compensation.

GLOSSARY

Board *modus operandi*: Policies established by the Board that prescribe how the Board will conduct itself. Examples of issues to be covered include:

- a) Board orientation and education
- b) Conflict of interest
- c) Travel
- d) Expenses and remuneration
- e) Communications with staff (e.g. requests for information or action)
- f) Communications with the public, members, media, etc.
- g) Communications with consultants, managers, and other service providers.
- h) Board procedures/rules of order
- i) Code of Conduct
- j) Political activities

Consultant: A service provider that provides advice or guidance. Generally includes general asset consultants, asset class consultants (e.g. real estate or alternative investments), lawyers, actuaries, etc.

Decision-making structure: A description of the key individuals and groups involved in the governance and management of the Fund, along with their roles and responsibilities. The description could take the form of a decision-matrix and/or Committee Charters, etc.

Desk Manuals: These contain detailed descriptions for completing specific day-to-day operational tasks involved in the investment management function.

Fund Mission/Goals/Objectives: A policy defining the broad objectives of the investment program.

Fund Monitoring Policy: This policy defines the manner in which the various fiduciary aspects of the investment program shall be monitored. For example, it could describe:

- a) The elements of the investment program that are to be monitored. For example:
 - i. Risk exposure and management
 - ii. Investment performance (e.g. total fund, asset classes, investment managers)
 - iii. Policy Compliance

- iv. Compliance by fiduciaries with their mandates
- v. Regulatory compliance
- b) The frequency with which the above elements are to be monitored.
- c) The approach to be followed in monitoring each element
- d) The parties responsible.

Internal Control System: This policy defines the basic elements of the internal control system for the investment administration program; i.e. an overview of the steps taken to ensure that the assets of the fund are safeguarded and properly accounted for at all times.

Investment Philosophy: A philosophical statement setting out STRS's beliefs and assumptions concerning issues such as:

- a) Diversification
- b) Market efficiency and active vs. passive management
- c) Performance measurement
- d) Corporate Governance/Ethical Investing/Social Responsibility

Investment Policy: Those decisions relating to the investment program that meet one or more of the following criteria:

- a) have long-term implications
- b) have the most direct or meaningful impact on the long-term success of the Fund
- c) significantly affect risk exposure
- d) significantly affect the cost structure of the Fund

The most important investment policies are generally considered to include the following:

- a) The long-term asset mix of the Fund (5-10 years or longer); implicit in this decision is the choice of asset classes
- b) The choice of investment benchmarks
- c) The extent of active management to be employed

Other examples of investment policies include, but are not limited to, the following:

- a) Investment securities quality criteria and/or restrictions

- b) Securities lending policy
- c) Portfolio re-balancing policy
- d) Derivatives policy
- e) Soft-dollar policy
- f) Internal versus external investment management

Investment Procedures: Written documents that direct the activities of staff and describe the means by which the investment policies will in fact be implemented. Procedures are typically dynamic in nature to facilitate adaptation to changing circumstances. At all times, however, they must be consistent with the investment policies.

Key Staff: For purposes of the STRS decision matrix, key staff is defined to include the Chief Executive Officer, Chief Investment Officer, and internal portfolio managers.

Manager: A service provider that manages an investment portfolio, engaging in stock selection, asset allocation, index construction, etc.

Process for selection of consultants and managers: This policy defines the basic procedures to be followed in the selection of managers, consultants, actuary, and other service providers.

Risk Management Policy: A policy setting out and prioritizing the various risks being managed through the investment program, and describing the basic approaches to be used in managing these risks.

APPENDIX B

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM
GOVERNANCE DECISION-MAKING STRUCTURE
PRINCIPLES OF DELEGATION (PROPOSED)

Background & Purpose

As follow-up work to the recent Pension Fund Governance Review conducted at STRS, the Board agreed to undertake a process whereby it would revise the current decision-making structure in order to achieve greater clarity on the roles of the parties involved in the governance and management of STRS.

Rather than immediately setting out to draft new job descriptions for each party, STRS decided that it would first step back and identify the underlying principles of delegation that would guide the Board in this important task.

Establishing such principles will help to ensure that there is an underlying logic to the delegation of duties, and will reduce the potential for future Boards to make ad hoc and arbitrary changes to the decision-making structure without considering the underlying principles of delegation.

Once the principles have been approved, Cortex will work with the Board and management to develop a proposed new decision-making structure (in matrix format) and corresponding terms of reference. For reference, we have attached a Decision Matrix illustrating the current decision-making structure at STRS.

Below, for the Board's consideration, are proposed Guiding Principles of Delegation. We ask that you review them in preparation for a presentation and discussion at the April meeting of the Board. If you have any questions or comments before then, you are encouraged to contact Tom Iannucci of Cortex directly at (416) 967-9045.

When reviewing the principles, please note:

- a) Following each principle is a brief description of the rationale behind it and, where, applicable an illustration of the concepts. The illustrations are not necessarily specific to STRS, but are offered for clarification only.
- b) For purposes of this exercise, we define the decision-making structure to be the delegation of investment-related duties to each of the following bodies within STRS.
 - the Board
 - Investment Committee
 - Chief Executive Officer
 - Chief Investment Officer
 - General Consultant
- c) Throughout this document we often refer to the terms policy and strategy. The meaning of these terms is often debated and common definitions have yet to be established. Therefore, for purposes of this document we have established the following definitions:

Policy is defined as high level decisions that:

- i. have the most direct and meaningful impact on the long-term success of the Plan;
- ii. significantly affect the risk exposure of the Plan; or
- iii. significantly affect the cost structure of the organization.

Policy decisions are generally long-term in nature and therefore should be made only infrequently. They should also generally be formulated so as to provide management with guidelines within which management will have flexibility to apply its own best judgment.

Strategy comprises shorter-term decisions that are generally made more frequently. The purpose of strategy is to create additional value within the guidelines established by policy. Strategy decisions are generally expected to have relatively less impact on the success of the Plan than policy decisions.

PRINCIPLES OF DELEGATION

1. *In designing a decision-making structure one should strive to achieve clarity. This implies that roles and responsibilities should be distinct (e.g. no overlap of duties among parties). They should also be documented using clear and unambiguous language so that everyone can understand and agree to abide by them.*

Rationale: Without sufficient clarity, the decision-making structure is likely to be misunderstood, or interpreted differently, by the various parties involved. This will, over time, reduce the effectiveness of the decision-making process, particularly where there is substantial turnover at the Board or management levels and, even more importantly, where the outcome of a decision proves to be unfavorable.

Illustration: If a decision, such as the selection of a real estate investment, is shared between the Board and CIO, and the decision ultimately proves to be a poor one, it will not be immediately obvious who was responsible for the decision. A great deal of frustration may result as the organization attempts to assign blame for the decision rather than learn from the experience.

2. *A decision-making structure should be comprehensive in that it addresses all decisions or tasks that can have a meaningful impact on the success of the pension fund.*

Rationale: If the decision-making structure fails to assign responsibility for an important task, then a vacuum is created and, inevitably, someone will step forward and assume responsibility for the task, even though he or she may not be the appropriate individual.

Illustration: A pension fund by definition must have its assets allocated among asset classes. Therefore, if the Board does not explicitly retain responsibility for the long-term asset allocation decision, staff will by necessity have to make the allocation decision themselves, and they will rely on their own best judgment in doing so. Given that the asset allocation decision is such a crucial decision, it may not be appropriate for the Board to allow another party to make this decision.

3. *The design of the decision-making structure should recognize that there are certain basic tasks that the Board cannot delegate. The Board should retain all duties that pertain to defining the objectives of the Fund, defining the levels and types of risk to*

which the Fund is exposed, and delegating responsibility to appropriate individuals. The Board also cannot delegate the responsibility for monitoring the performance of the Fund, ensuring the safekeeping of the assets, and monitoring its own performance.

Rationale: By virtue of the Board having a trustee function, we would suggest that the above represents the minimum role the Board should play.

4. *The Board should delegate duties to those decision-making levels that are most likely to possess the requisite knowledge, experience, time availability, or independence to carry them out successfully.*

Rationale: Many operational decisions, such as the selection of specific investments or investment managers, have relatively little impact on the financial performance of the total fund. However, they require highly specialized knowledge that can usually only be developed with years of experience. Furthermore, the decisions themselves are generally time consuming and labor intensive. The organization would be better served if the Board would delegate such decisions to staff and focus its efforts on higher-level policy issues that it is better positioned to address, and that have a greater impact on the Fund.

5. *The decision-making structure should be designed so that responsibility for high-level policy, strategy, and implementation issues are separated.*

Rationale: There are five basic types of activity involved in the management of a pension fund:

1. Setting broad policy
2. Setting strategy
3. Implementing policy and strategy (i.e. operations)
4. Providing an objective external perspective
5. Monitoring

The above activities are distinct and require unique skills, perspectives, and time availability in order to carry them out successfully. Also, if a decision-making level attempts to undertake two or more of the activities, accountability can be severely weakened. Therefore, we have found that pension funds operate most effectively if the above activities, with the exception of monitoring, are separated and assigned to different levels of the organization.¹

Illustration: Table I below describes the process of selecting an investment manager, and demonstrates how a single task can in fact comprise policy, strategy, and implementation components.

¹ Monitoring is an activity that all levels of the organization can perform. However, different levels will typically monitor different issues, with different frequencies, and at varying levels of detail.

Table I

i.	Decide whether the Fund should pursue an active management approach and expose itself to the risks inherent in active management.	<i>Policy</i>
ii.	Decide which asset classes should be managed actively.	
iii.	Decide the performance targets and benchmarks.	
iv.	Decide whether the Fund should use internal or external managers.	
v.	Approve the process and criteria to be used in selecting investment managers.	
vi.	Decide upon the manager structure for each actively managed asset class; e.g. proportion internal versus external, number of managers, allocation to each manager, style, etc.	<i>Strategy</i>
vii.	Identify candidates that should initially be considered for selection?	<i>Implementation</i>
viii.	Assess the available candidates	
ix.	Select suitable candidates	
x.	Prepare mandates or portfolio guidelines	

One could argue that steps i. through v. are policy decisions and should be retained by the Board; step vi. is a strategic decision and should be delegated to senior management; and steps vii. through x. are implementation issues and should be delegated to management or operating staff.

Separating policy, strategy and implementation in the above manner helps to ensure clear accountability. For example, if the CIO were to direct investment managers to purchase specific securities, he would no longer legitimately be able to hold the manager accountable for investment results since the performance is now, at least partly, attributable to the CIO.

6. *In designing the decision-making structure, one should strive **to maximize the degree of objectivity or independence with which all parties approach their role and***

*responsibilities. Stated another way, the structure should **minimize the existence of conflicts of interest** that might reduce the objectivity of any of the parties involved.*

Rationale: If this principle is not adhered to, a greater potential exists for individuals to put their own personal interests, or those of a particular constituency group, above the best interests of the Fund and the beneficiaries.

Illustration: Examples of provisions that will enhance objectivity and independence in the decision-making process include:

- a) To the extent practicable, no party should assess its own performance. Parties may, however, have input into their own performance appraisals.
- b) If any external consultant is expected to comment on the work or performance of internal staff, then staff should have little or no ability to influence the appointment or reappointment of the consultant.
- c) If the external consultant is expected to provide an independent and objective perspective on the investment program, he or she should be in a position to comment on any aspect of the investment program without having a vested interest in the outcome.

7. *The decision-making structure should reflect a linear reporting structure. That is, the organization should consist of a single line of authority and accountability whereby each decision-making party reports upward ultimately through the CEO to the Board itself.*

Rationale: While there appear to be two completely distinct organizations within a pension plan, benefits administration and investments, they are in fact inextricably linked in two crucial ways:

- a) Ultimately, the objective of the investment program is to ensure that sufficient funds exist to pay the benefits; therefore there exists a relationship between the assets and the benefits that must be carefully managed.
- b) The two functions are linked organizationally in that organizational decisions made in either area may affect the other. For example, increasing the level of investment management performed in-house may reduce the budget available to hire benefit administration staff.

Given that the investment and benefit administration functions are in some ways linked, we would suggest that a single executive should be accountable for integrating both and making the compromises necessary to achieve the Plan's Mission. If the two

functions are managed independently by different executives, then leadership for the organization as a whole is weakened, conflicts will inevitably arise, and the Board will have to adjudicate – which is arguably not a good use of the Board’s time. Depending on the personalities of the executives involved, these conflicts may or may not manifest themselves to the Board, but nevertheless the effectiveness of a decision-making process should not rely solely on the personalities of the individuals involved. We suggest, therefore, that the decision-making structure should be designed to minimize the above problem and ensure that strong leadership is in place for the organization as a whole.

Illustration: Below is a practical example of how the above principle can be applied to the CEO-CIO relationship:

The CEO would be responsible for soliciting the CIO’s views and endorsing his recommendations for Board approval on issues that fall into any of the following categories:

1. Affect the broad direction of the investment program. For example:
 - a) Major changes in long-term asset allocation that widen the mismatch with plan liabilities or that diverge from the asset mix policies of peers.
 - b) Switching from active to passive management or vice versa
2. Substantially increase the risk exposure of the Fund. For example:
 - a) New risky asset classes
 - b) Introduction of or exit from non-traditional asset classes
3. Have significant implications for the organization in terms of human resources, computer systems, public perception, fixed or variable costs; etc. For example:
 - a) Increasing the amount of investment management performed in-house
 - b) Increased use of active management

If the CEO endorses and the Board approves the CIO’s recommendations, then the CIO is responsible for implementing the relevant policies or strategies; i.e. establishing manager structures, selecting appropriate investment managers, hiring investment staff, day-to-day monitoring, etc.

8. *The decision-making structure should consciously incorporate checks and balances to ensure that all decision-making parties feel a strong sense of accountability for their performance.*

Rationale: The essence of good governance is strong accountability. Given human nature, it would not be prudent to rely solely on the good will, dedication, and

integrity of individuals, and trust that they will work to their potential and in the best interests of the Fund. Experience suggests, instead, that people tend to perform at higher levels if they know that they must account for their performance.

Examples of checks and balances that may be incorporated into the decision-making structure include:

- a) Each decision-making level is clearly accountable to a more senior level for meeting its responsibilities.
 - b) Each decision-making level is responsible for monitoring that the policies or strategies it approves are being complied with.
 - c) Whenever a party delegates responsibility to another party, it must monitor to ensure that the responsibilities are in fact carried out, are consistent with policy guidelines, etc.
 - d) Whenever a party delegates a relatively risky task (e.g. selection of external investment managers) it should issue appropriate guidelines to be followed in carrying out the task.
9. *In designing a decision-making structure, the Board should strive to balance the need to maintain risk control with the need to encourage innovation and initiative among staff.*

Rationale: As part of its oversight function, the Board is expected to establish mechanisms to control and direct the activities of staff. Ultimately, however, the creation of value by the enterprise will depend upon the successful application of knowledge, expertise, and experience, most of which will always reside with staff. If value is to be created, therefore, the controls established by the Board should not be so constrictive that staff is unable to pursue opportunities for creating value.

Illustration: If the Board believes that it would like staff to create value through strategic asset allocation (i.e. market timing) then the decision-making structure could be designed as follows:

- a) The Board is assigned responsibility for setting ranges around the long-term asset mix within which staff can have the flexibility to conduct market timing. In doing so, the Board effectively controls the risk that the Fund's performance will not differ significantly from what would have been achieved had the long-term asset allocation been maintained.

- b) Staff is now free to apply its expertise and judgment to forecast the relative performance of different asset classes in order to add value.
- c) The Board then monitors staff's performance to ensure that over the long run staff is in fact adding value through the market timing strategy.

10. The decision-making structure should include a mechanism that will enable it to continually evolve to best meet the needs of the organization.

Rationale. Unless a mechanism is established to review periodically the appropriateness of the decision-making structure, the structure will not be able to adapt to changing circumstances; the structure will eventually become obsolete, and all the effort that went into designing it in the first place will have been wasted.

Therefore the organization should establish a mechanism whereby the decision-making structure is periodically reviewed to ensure that it continues to be appropriate.

The following pages contain a decision matrix that illustrates STRS' current decision-making structure as described in existing committee charters, delegations of authority, positions descriptions, and contracts.

The decision matrix is provided to the Board as a reference tool only.

Level	Policy	Strategy	Implementation	Monitoring
Board of Directors	<u>Approves:</u> <ul style="list-style-type: none"> Plan investment policy Allowable investment vehicles Broad asset allocations Annual budgets as recommended by CEO All investments issues where CEO does not approve of CIO recommendations Rate of returns on investments and contributions rates to the retirement fund (based on actuarialpt.) Mandate of CEO Audited financial statements Performance measurements Investment Resolutions 	<u>Approves:</u> <ul style="list-style-type: none"> Investment Management Plan Use of internal vs. external investment management Short & long-term investment strategy Investment manager structure Annual goals & objectives for Investment Branch 	<u>Manages/accountable</u> <ul style="list-style-type: none"> Ratify all actions taken by IC Ratify all actions taken by CEO that he does not have authority to act finally Appoint CEO Appoint necessary employees to administer System Resolve issues where CEO and CIO disagree Appoint Auditor Select and retain asset managers, investment consultants, and other advisors Select Actuary Select Accountant Executive voting rights for plan investments	<u>Monitors:</u> <ul style="list-style-type: none"> All actions of CEO All actions of CIO Annual System operations including investment results as reported by CEO Appropriateness to hire external management expertise Economic forecasts, capital markets, and state of economic conditions (reported by the CIO)
Investment Committee of the Board	<u>Recommends to the Board on</u> <ul style="list-style-type: none"> Investment policy Broad asset allocation New legal investment vehicles Recommend procedures for selection of Chief of Investments 	<u>Recommends to the Board on</u> <ul style="list-style-type: none"> Overall investment strategy 	<u>Recommends to Board on:</u> <ul style="list-style-type: none"> Selection and retention of asset managers, investment consultants, and advisors <u>Manages/accountable (subject to Board Ratification):</u> <ul style="list-style-type: none"> Act on all investment related legislative proposals Implement social responsibility statement Executive voting rights for investment where the Board has not already reserved its right to vote 	<u>Monitors:</u> <ul style="list-style-type: none"> Internal and external investment manager performance Receipt of periodic reports from investment managers and internal investment staff Compliance of investments with Investment Resolutions Receipt of reports on all real estate equity investments Social responsibility statement Compliance with investment due diligence process
Budgets & Audit Committee			<u>Manage:</u> <ul style="list-style-type: none"> Annually compile the Budget of the System 	<u>Monitor:</u> <ul style="list-style-type: none"> Reports and presentations from the Actuary
Ad Hoc Governance Committee	<u>Recommends to the Board:</u> <ul style="list-style-type: none"> Delegations to CEO, CIO, or other staff positions Revisions to Board Policy Manual Policies on Board operations Statement of Ethical Conduct Roles of Board officers, Committee Chairs, and members Board travel policy Guidelines for interaction with staff 			
Committee on Executive Comp.	<u>Approve:</u> <ul style="list-style-type: none"> Performance criteria for CEO, CIO & other positions Pay incentive program 		<u>Manage:</u> <ul style="list-style-type: none"> Assess performance & determine salaries for CEO, CIO, and other employees exempt from civil service 	
Subcommittee on Corporate Governance	<u>Recommend to Board:</u> <ul style="list-style-type: none"> Financial Proxy Guidelines Statement of Investment Responsibility Actions on votes that fall outside of proxy guidelines Shareholder resolutions 		<u>Manage:</u> <ul style="list-style-type: none"> Development of Annual Corporate Governance Plan Liaise with Council of Institutional Investors 	<u>Monitor:</u> <ul style="list-style-type: none"> Status of proxy voting Summary of votes cast

Level	Policy	Strategy	Implementation	Monitoring
CEO			<u>Recommends to Board or its committees:</u> <ul style="list-style-type: none"> Hiring of in-house investment personnel Appointment of Actuary Appointment of Accountant <u>Manages/accountable</u> <ul style="list-style-type: none"> Planning, organizing & directing work of the System (Benefits Administration and Investments) Executive all documents or authorize the issuance of instructions recommended by the CIO as necessary to manage investments* Arrange for Board/staff to attend Educ. Conferences Providing administrative services for the implementation of investment management plan Execute voting on corporate governance matters as per Board approval Act as secretary and spokesperson for the Board Maintain system of records and accounts Fulfill all regulatory requirements of the plan 	<u>Monitors above plus</u> <ul style="list-style-type: none"> CIO duties* All investment related activities of the System
CIO	<u>Recommends to Board:</u> <ul style="list-style-type: none"> Asset allocation decision Proxy voting policy Investment procedures to ensure due diligence <u>Recommends to CEO on:</u> <ul style="list-style-type: none"> Internal administration services and external third party service contracts and mandates Hiring of internal/external investment management Payment for investment services Investment procedures to ensure due diligence and appropriate documentation relating to investments 	<u>Recommends to Board:</u> <ul style="list-style-type: none"> Investment Strategy (short-term and long-term) Manager structure Investment Management Plan Changes to the Annual goals and objectives for the Investment Branch 	<u>Manages/accountable</u> <ul style="list-style-type: none"> Implement Board approved investment policies and programs (including Investment Management Plan, annual goals and objectives for Investment Branch) Implement annual asset allocation Advise Board on all investment related matters and impact of potential legislation Implement investment strategy & manager structure Coordinate monthly Investment Committee agenda Advise Board on advisers * consultants Establish reporting mechanisms 	<u>Monitors:</u> <ul style="list-style-type: none"> Compliance by external portfolio managers, advisors, and consultants with their mandates Appropriateness of plan asset mix Capital markets Proxy voting policies Investment related matters
General Consultant	<u>Recommends to Board:</u> <ul style="list-style-type: none"> Performance-based fee structures Performance benchmarks <u>Recommends:</u> <ul style="list-style-type: none"> Asset allocation policies Emerging market policies, procedures, and guidelines Operational policies and procedures manual 	<u>Recommends to Board:</u> <ul style="list-style-type: none"> Asset allocation strategies Alternative investment strategies Investment Management Plan Portfolio structure 	<u>Manages/accountable</u> <ul style="list-style-type: none"> Prepare/present reports to review investment policy and strategy, pension issues, manager searches Maintain investment manager data base Prepare policy and procedures manuals Conduct performance measurement services Attend meetings of the IC as required Provide investment training to Board and Staff Conduct Annual Planning and Review Workshop 	<u>Monitors:</u> <ul style="list-style-type: none"> Appropriateness of investment policy, portfolio mix, and investment strategy Quarterly evaluation of STRS portfolio managers Interpret performance measurement and evaluation reports from custodian

APPENDIX C

BENCHMARKING STUDY**1.0 BACKGROUND**

This study was undertaken in an effort to identify alternative governance and decision making practices being followed by other pension plans that are comparable to STRS. This information will aid the STRS Board as it reviews its own decision making practices and considers potential modifications.

The methodology used in completing the Study was as follows:

- 1) The relevant governance issues to be investigated were identified.
- 2) Six comparable funds were identified and contacted for the purposes of arranging meetings.
- 3) Interviews were conducted either in person or by telephone. In all cases, the interviews were conducted with an executive reporting directly to the Board. (Either the CEO or CIO.)
- 4) Follow-up calls were made to ensure the accuracy of the data and request additional information.
- 5) The data were summarized and a report was prepared.

The following report describes the peer group that was studied and summarizes our findings in each of the areas listed below:

- Board composition;
- Role of the Chair;
- Senior Executive Structure;
- Committee structure;
- Time commitment;
- Use of consultants;
- Delegation of Authority; and
- Policies.

2.0 THE PEER GROUP

In carrying out the Study, we focused on the following 6 pension organizations:

Los Angeles County Employees Retirement Association (LACERA);
New York State Teachers' Retirement System (NYSTRS); and
Pension Reserves Investment Management Board of Massachusetts (PRIM);
Public Employees' Retirement Association of Colorado (PERA);
State Employees' Retirement System of Pennsylvania (SERS);
Virginia Retirement System (VRS).

Collectively, we believe that these pension funds comprise a reasonable peer group for comparison purposes because:

- 1) All of the funds are large, public pension plans, varying in asset size from \$20 billion to \$80 billion.
- 2) All of the funds invest, to some degree, in Real Estate and Alternative investments in addition to traditional asset classes.
- 3) Most of the funds studied are responsible for both investments and benefits. The exceptions are PRIM and LACERA's Investment Board which are only responsible for investments. (LACERA has 2 Boards, an Investment Board and a Retirement Board.)
- 4) One difference among the funds pertained to the investment management structure. Three of the funds utilize in-house investment management while the other three do not.

3.1 FINDINGS: BOARD COMPOSITION

Board composition refers to the physical makeup of the Board i.e. the number of members and the process by which they arrive at the Board. The results of the survey can be summarized as follows:

- a) The Boards varied in size from 9 to 16 members.
- b) Most funds have 1 or 2 ex-officio members.
- c) The remaining Board members are split approximately equally between appointed and elected sources.
- d) Most pension organizations have only 1 Board.

Pension Fund	Number of Members	Ex-Officio	Appointed	Elected
LACERA Investment	9	1	4	4
LACERA Retirement	9	1	4	4
NYSTRS	10	1	5	4
PRIM	9	2	3	4
PERA	16	2	0	14
SERS	11	1	10	0
VRS	9	0	9	0

The Exhibit following this report further illustrates the Board composition of each Fund.

3.2 FINDINGS: ROLE OF THE CHAIR

This section addresses the role of the Chair. We found that, in general, the Board Chairs at the various pension organizations are expected to play a similar role:

- a) All Chairs are expected to run the meetings of the Board.
- b) Some Chairs may act as spokesperson for their Fund, in conjunction with other members of the Fund, such as the CEO.
- c) Many Chairs are responsible for appointing members to committees.

3.3 FINDINGS: SENIOR EXECUTIVE STRUCTURE

In general, the CEO reports to the Board, and the CIO reports to the CEO. The exception is VRS where the CIO reports directly to the Board. The Exhibit following this report details these relationships for each fund.

The Board is usually involved in selecting and evaluating the CIO. In some cases, however, these tasks are delegated to the CEO; eg., LACERA and PERA.

3.4 FINDINGS: COMMITTEE STRUCTURE

For the purposes of this study, an Advisory Committee is defined as a committee comprised of external experts, with possibly some Trustees, who advise the Board on investment issues.

Observations with regards to committee structure can be summarized as follows:

- a) The number of standing committees used by the Boards varies considerably. On the low end, some funds have no committees while, at the other extreme, a fund may utilize as many as 10 committees.
- b) There are no common characteristics within the peer group with regard to the use of Investment Committees and Advisory Committees . Two funds in the peer group have no investment-related committees, one fund uses an Investment Committee of the whole and an Asset Management Sub-committee but no Advisory Committees, two funds use only Advisory Committees, and one fund uses both an Investment Committee and two Advisory Committees.

Pension Fund	Number of Active Board Committees	Investment Committees	Investment Advisory Committees
LACERA Investment	0	0	0
LACERA Retirement	4	0	0
NYSTRS	10	1	2
PRIM	0	0	2
PERA	8	2 *	0
SERS	1	0	0
VRS	0	0	1

* PERA consists of an IC of the whole Board and an Asset Management sub-committee. The following Exhibit contains illustrations and details of each of these relationships.

3.5 FINDINGS: TIME COMMITMENT

The number of Board and committee meetings and their typical duration were recorded for each fund. The time committed to Board and committee meetings can be summarized as follows:

- a) The number of Board meetings per year varies from a low of 4 per year to a high of 24 per year. The meetings vary in duration from 2.5 hours to 2 days.
- b) The number of committee meetings per year varies from a low of 4 per year to a high of 12 per year. These meetings last anywhere from 1 to 4 hours.
- c) The average amount of time spent in Board and committee meetings is estimated to be 70 to 80 hours per year.

Pension Fund	Number of Board meeting/year	Duration of Board meeting	Number of Committee meeting/year	Duration of Committee meeting
LACERA Investment	24	4 hr	0	n/a
LACERA Retirement	12	4 hr	0	n/a
NYSTRS *	4	2 days	IC: 4 AC: 4 AC (RE): 4	4 hr 4 hr 4 hr
PRIM	6 to 7	3 hr	AC: 6 to 7	1 to 2½ hr
PERA **	12	½ to 1 day	IC: 12 AMS: 5	½ hr 2 hr
SERS	6 to 8	¾ to 1 day	0	n/a
VRS	6 + 1 retreat	2.5 hr	0	n/a

* IC = Investment Committee, AC = Advisory Committee, AC (RE) = Real Estate Advisory Committee

** AMS = Asset Management Sub-Committee

3.6 FINDINGS: USE OF CONSULTANTS

This section addresses the use of general consultants and external fiduciary counsel. The findings are as follows:

- a) Most funds have a general consultant. The exception is VRS.
- b) The general consultant typically provides research, performs asset mix studies, conducts manager searches, and advises the Board on investment-related issues.
- c) Staff is typically highly involved in selecting the general consultant. In the case of SERS, however, staff coordinates the process, but the Board is actively involved in it. Specifically, a Board committee is used to review requests for proposals, meet the consultants, and present final candidates to the Board. The Board interviews the final candidates and awards the contract.
- d) In none of the cases studied does an external fiduciary counsel attend meetings of the Board on a regular basis.
- e) Of those funds that do utilize a fiduciary counsel, the counsel's role is often to provide annual education seminars, and/or provide advice on specific issues as required.

3.7 FINDINGS: DELEGATION OF AUTHORITY

This section of the survey addresses the question of how authority for certain decisions has been delegated:

- a) All of the Boards retain the responsibility for setting high level policies, such as setting the long term asset mix, benchmarks, and active / passive allocations.
- b) Except in the case of VRS, all of the Boards retain the responsibility for setting internal/external management levels and manager structure.
- c) Selection of traditional investment managers is a Board responsibility for all funds except VRS, which delegates this responsibility to the CIO.
- d) Selection of non-traditional investment managers is usually a Board responsibility, but is sometimes delegated to a consultant or the CIO. For example, in the case of VRS, the CIO selects all non-traditional investment managers; in the case of LACERA, an investment consultant has full discretion over the selection of all non-traditional investments; and in the case of PERA, staff selects real estate managers if the total investment is less than \$50M.
- e) The selection and evaluation of the CIO is the CEO's responsibility in half of the funds; it is the Board's responsibility (based upon staff recommendations) in the rest of the funds.

3.8 FINDINGS: POLICIES

We asked interviewees about the various policies in place at each fund. Our findings were as follows:

- a) All of the Funds have formal policies covering the fundamental investment issues such as long-term asset mix, re-balancing, and manager selection.
- b) All Funds have a travel policy, except VRS, where travel is left to Trustees' discretion.
- c) With respect to fiduciary education, half the funds indicated that they have a policy in place.
- d) With respect to performance monitoring, several funds have formal policies in place. Others indicated that they have well established practices though they are not necessarily documented.

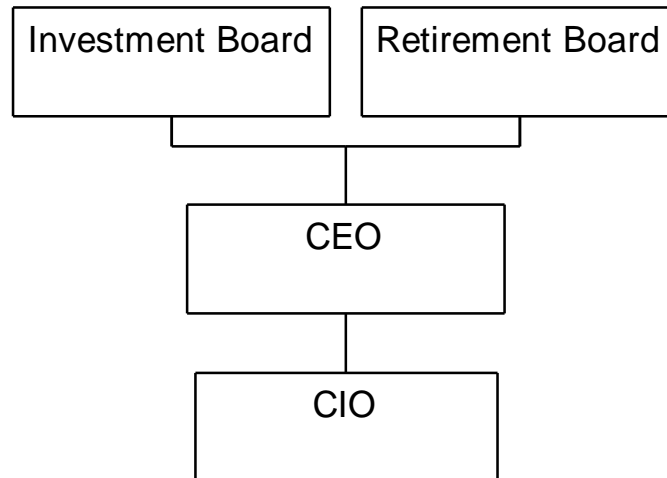
Exhibit

Board Composition, Committee Structure, and Senior Executive Structure of Peer Group

Pension Funds:

Los Angeles County Employees Retirement	A11
New York State Teachers' Retirement System	A12
Pension Reserves Investment Management Board of Massachusetts	A13
Public Employees' Retirement Association of Colorado	A14
State Employees' Retirement System of Pennsylvania	A15
Virginia Retirement Systems	A16

Los Angeles County Employees Retirement Governance Structure - Investments

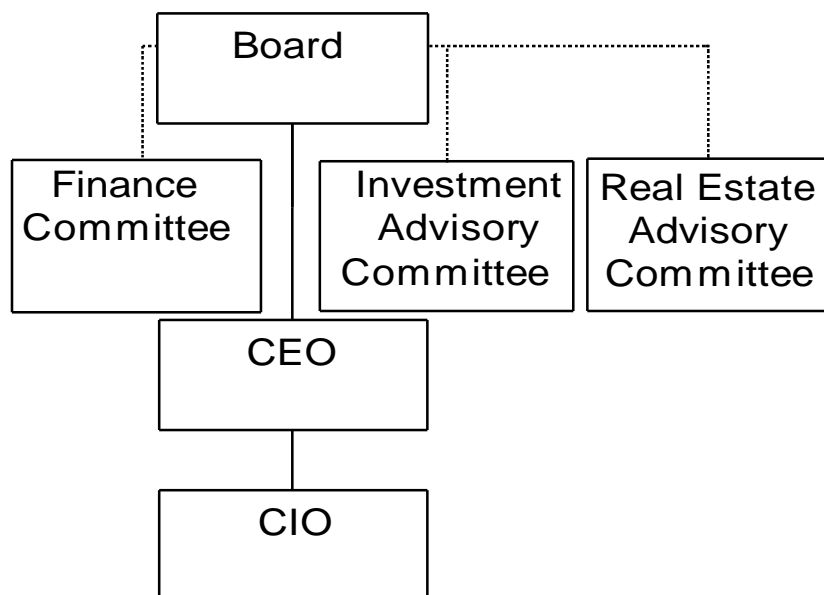


Details:

- a) LACERA has two Boards. The members of each Board may or may not be the same people.
- b) The Investment Board is comprised of 9 members. One of the members is an ex-officio member, 4 are appointed members who must have proven investment expertise, and 4 are elected members. The sub-committees of this Board are inactive.
- c) The Retirement Board is also comprised of 9 members plus one alternate; with 1 ex-officio member, 4 appointed members, and 4 elected members.
- d) Only the CEO reports directly to both Boards.
- e) There are no investment-related advisory committees to the Board.
- f) The Chairs run Board meetings and appoint individuals to committees.
- g) The CEO serves as the spokesperson for the Board.

New York State Teachers' Retirement System

Governance Structure - Investments

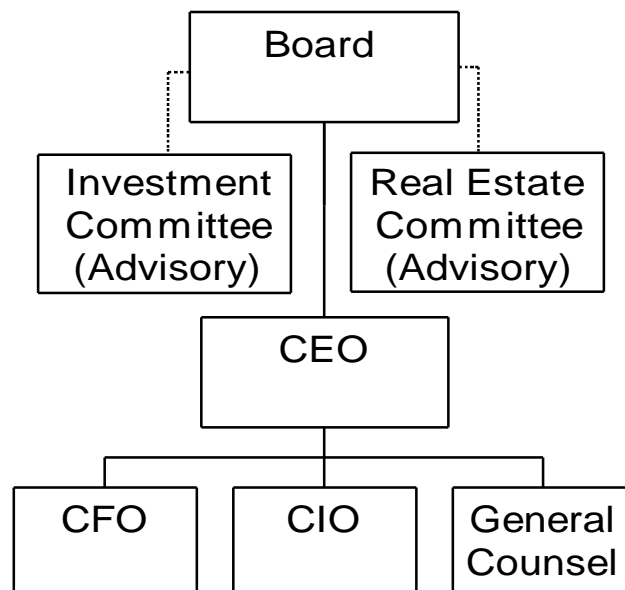


Details:

- a) The Board is comprised of 10 members. One of the members is an ex-officio member, 5 of the members are appointed, and 4 are elected.
- b) Only the CEO reports directly to the Board.
- c) There is one standing investment-related committee, the Finance Committee.
- d) There are two investment-related advisory committees: the Investment Advisory Committee and the Real Estate Committee.
- e) The Investment Advisory Committee, comprised of six investment professionals, provides the Board with advice on high level investment policy issues.
- f) The Real Estate Advisory Committee is made up of 7 prominent industry people. It is more focussed on specific transactions. Both this committee and staff make recommendations to the Board regarding Real Estate issues.
- g) The CEO is currently also the CIO.

Pension Reserves Investment Management Board of Massachusetts

Governance Structure - Investments

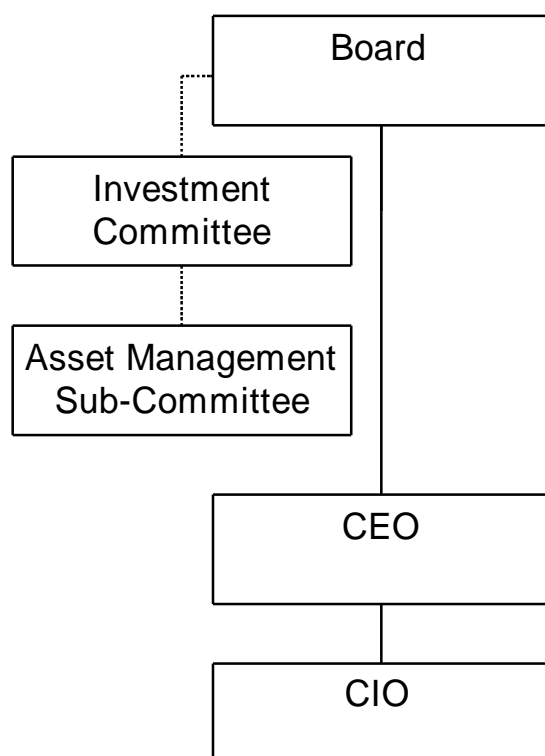


Details:

- a) The Board is comprised of 9 members. 2 of the members are ex-officio, 2 of the members are appointed by the Governor, 1 is appointed by the Treasurer, and 4 are elected.
- b) Only the CEO reports directly to the Board.
- c) There are no standing investment-related committees.
- d) There are two investment-related advisory committees, the Investment Committee and the Real Estate Committee. The Investment Committee is comprised of 5 external members with 2 Board members. The Real Estate Committee is comprised of 4 Board members and 3 external members.
- e) The State Treasurer is automatically the Board Chair.

Public Employees' Retirement Association of Colorado

Governance Structure - Investments

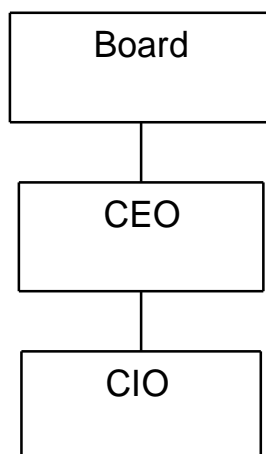


Details:

- The Board is comprised of 16 members. 2 of the members are ex-officio and 14 are elected.
- Only the CEO reports directly to the Board.
- There are 2 standing investment-related committees. The Investment Committee is a committee comprised of the whole Board. The Asset Management Sub-Committee is a sub-committee of the Board which provides recommendations to the Investment Committee.
- There are no investment-related advisory committees.
- The Chair runs meetings of the Board, appoints people to committees, appoints Committee Chairs, and meets monthly with the CEO and executive committee. The Chair is elected for a 2 year period, with the possibility of one renewal period.

State Employees' Retirement System of Pennsylvania

Governance Structure - Investments

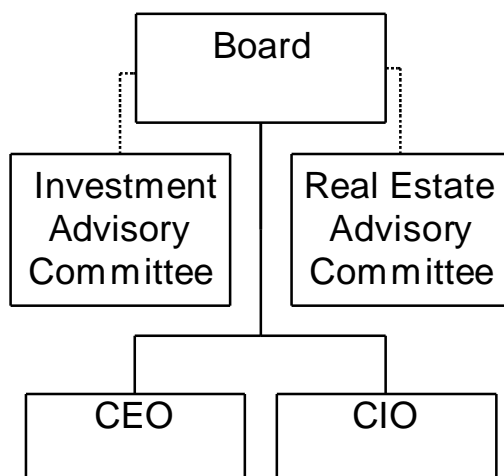


Details:

- a) The Board is comprised of 11 members. One of the members is an ex-officio member, 6 of the members are appointed, and 4 are legislated.
- b) Only the CEO reports directly to the Board.
- c) There are no standing investment-related committees. There is only one active committee, the Personnel Committee, which addresses investment issues in addition to other issues.
- d) There are no external investment-related advisory committees.
- e) The Chair runs meetings of the Board, appoints members to committees, and serves ex-officio on all committees.

Virginia Retirement System

Governance Structure - Investments



Details:

- a) The Board is comprised of 9 members. 5 are appointed by the Governor, and 4 are appointed by the General Assembly.
- b) Both the CEO and the CIO report directly to the Board.
- c) There are no standing investment-related committees.
- d) There is an Investment Advisory Committee. It is comprised of 7 to 9 external members and 1 trustee.
- e) It is likely that the Investment Advisory Committee and the Real Estate Advisory Committee will be merged.